

53d TEST AND EVALUATION GROUP

The **53d Test and Evaluation Group** is located at Nellis Air Force Base, Nev. The group is made up of seven squadrons, two direct-reporting detachments, a named flight, and an operating location across nine stateside locations. The 53d TEG is responsible for the overall management of the wing's flying activities at Barksdale, Beale, Dyess, Edwards, Eglin, Nellis, Whiteman, and Creech Air Force bases. Members of the group execute operational test and evaluation and tactics development and evaluation projects for Headquarters Air Combat Command. Aircraft assigned to the group include test-configured F-22, F-15C, F-15E, F-16, A-10, B-52, B-1, HH-60 and MQ-1 aircraft with flying hours assigned to the B-2, RQ-4 and U-2 aircraft. The 53d TEG also supports current AFOTEC efforts with the JSF, Airborne Laser, and MQ-9.

The **31st Test and Evaluation Squadron** is located at Edwards Air Force Base, Calif., with an operating location at Gray Butte, Calif. The squadron evaluates the operational effectiveness and suitability of advanced ACC weapon systems by providing operations, maintenance and engineering experts to work alongside Air Force Materiel Command and Air Force Operational Test and Evaluation Center personnel. Current operational test and evaluation programs involve the B-52, B-1, B-2, F-22 Joint Strike Fighter, RQ-4 Global Hawk, MQ-9 Reaper, and the Airborne Laser. Squadron personnel integrate live test results with modeling and simulation data to predict combat capabilities under realistic scenarios, setting the stage for the development of new Combat Air Force tactics. Results and conclusions support DoD acquisition, deployment and employment decisions.

The **49th Test and Evaluation Squadron** at Barksdale Air Force Base, La., perfects lethality by executing conventional and nuclear Operational Test & Evaluation, directing Nuclear Weapon Systems Evaluation Program and developing tactics, techniques and procedures to maximize B-52 readiness, optimize CAF integration, and validate national defense capabilities. The 49th TES executes conventional OT&E to increase B-52 capabilities through improvements in sensors, weapons, communications, and navigation systems. The squadron also plans, executes, analyzes, and reports ACC's \$50 million annual air-delivered NucWSEP (Combat Sledgehammer). Reliability data for nuclear-capable aircraft (B-52, B-2, F-15 and F-16) and weapons (all nuclear bombs and cruise missiles) is reported to USSTRATCOM for inclusion in their annual strategic war plan update. The 49th TES is the Air Force's premier cruise missile test organization, launching approximately 6-12 conventional and nuclear cruise missiles each year.

The **72d Test and Evaluation Squadron** at Whiteman Air Force Base, Mo., is the focal point for executing operational test and evaluation of the \$44.6 billion B-2 weapon system. The squadron evaluates the ability of the B-2 weapons system to support all major requirements and reports weapon system capabilities. The unit provides experienced operations, maintenance, engineering, and analysis personnel who plan and conduct ground and flight tests, and analyze, evaluate, and report on the effectiveness and suitability of B-2 logistics support, tactics and survivability, foreign military exploitation, weapons and mission planning. The squadron reports results and conclusions to support DoD acquisition, deployment and employment decisions.

The **85th Test and Evaluation Squadron**, located at Eglin Air Force Base, Fla., is responsible for conducting operational test and evaluation and tactics development and evaluation programs for F-15C, F-15E, and F-16CG/CJ aircraft. Utilizing specially instrumented aircraft, the 85th evaluates current and future weapons, and associated electronic warfare subsystems. The 85th TES tests and evaluates the newest air-to-ground munitions, air-to-air missiles, electronic warfare systems, and associated subcomponents and avionics. It provides operational fighter expertise to U.S. Air Force Headquarters, DoD agencies, and the aerospace industry in the development of future aircraft and employment techniques and concepts. The 85th's core competencies are air-to-air missile employment and tactics, suppression and destruction of enemy air defenses and lethal precision engagement.

The **337th Test and Evaluation Squadron** at Dyess Air Force Base, Texas, conducts B-1 Force Development Evaluation and TD&E to support B-1 systems and weapons upgrades to improve B-1 employment capabilities. They also develop and evaluate tactics optimizing the combat capability for the B-1. The 337th TES conducts selected foreign materiel exploitation and field visits familiarizing operational units with new developments. It provides operational expertise to U.S. Air Force Headquarters, DoD agencies, and the aerospace industry in the development of future capabilities.

The **422d Test and Evaluation Squadron** at Nellis AFB, Nev., is a composite squadron executing HQ ACC-directed operational test and evaluation and tactics development and evaluation for A/OA-10, F-15C, F-15E, F-16C and F-22A hardware, software and weapons upgrades prior to CAF release. The squadron conducts tactics development, foreign materiel exploitations, and special access programs to optimize system combat capability. Conducts field visits to instruct ops aircrews on new systems tactics.

Detachment 2 of the 53d TEG at Beale Air Force Base, Calif., executes Force Development Evaluation of the U-2 and RQ-4 High Altitude weapon systems. They provide experienced operation, maintenance, engineering, and analysis personnel who plan and conduct ground and flight tests, analyze, evaluate, and report on the effectiveness, suitability and all related logistics, support, and training issues. Results and conclusions support DoD deployment and employment decisions.

Detachment 3 of the 53d TEG at Nellis AFB is the representative for ACC interests in FME testing with AFMC. The detachment's primary mission is to ensure USAF combat aircrews are prepared to fight with the latest knowledge available through FME. It maintains an active involvement with AFMC and other agencies such as the National Air Intelligence Center and the Adversary Tactics Group for data analysis and to ensure FME test results are reported to the CAF. In addition, Detachment 3 is the liaison for FME training conducted on the Nellis Range Complex, providing procedures and acting as subject matter experts on key systems.

The **556th Test and Evaluation Squadron** at Creech Air Force Base, Nev., executes MQ-1 Predator Unmanned Aircraft System OT&E and FDE for the Aerospace Command

and Control Intelligence Surveillance and Reconnaissance Center and tactics development for ACC. The 556th TES provides operational expertise to developmental test and evaluation for new sensors, hardware, weapons and software upgrades. During the first months of existence, the squadron's aircrew launched the first AGM-114 Hellfire missile from a U.S. Air Force UA and was instrumental to bringing the capability to fly and control four UA with one pilot to the warfighter. The 556th TES is integral to "normalizing" the first advanced concept technology demonstration into a major weapon system and is heavily involved with the development of the MQ-9 Reaper and MQ-1C an Army Warrior variant aircraft. In addition, the 556th TES conducts special access projects and field visits to familiarize and instruct operational units on new developments and tactics.

The **Combat Search and Rescue Combined Test Force** is located at Nellis AFB and is one of only two integrated test units in the 53 WG. The CSAR CTF integrates Developmental Test and Operational Test units into a Combined Test Force comprised of personnel and resources from both AFMC and ACC. A benchmark in testing efforts, the CSAR CTF strives to shorten the acquisition process by integrating both OT and DT aircrew into as many tests as possible which allows for continuity and faster return time on test articles and TTPs. The CSAR CTF is currently the Responsible Test Organization for both HH-60G Pavehawk aircraft and the Guardian Angel Weapons System. The CSAR CTF is currently working to acquire HC-130 test resources and eventually the addition of the CSAR-X program will be added to the CSAR CTF lineup thus completing the effort to align all Combat Search and Rescue Mission Areas into one organization.

The 53d TEG also has an A-10 liaison office at the Air National Guard Air Force Reserve Test Center located in Tucson, Ariz., on the facilities of the 162d Fighter Wing, Air National Guard. It is one of three principal ACC organizations responsible for planning, coordinating and accomplishing OT&E and TD&E. AATC's mission is operational testing of Air National Guard and Air Force Reserve unique systems, subsystems, modifications, tactics, techniques and procedures as well as other systems for which AATC has been designated as the lead test center. The goal of AATC is to improve the combat capability of the "mature" weapons systems flown by the Guard and Reserve through the use of low cost, off-the-shelf technologies which can be fielded in a timely manner. AATC initiatives include the Situation Awareness Data Link, night vision compatible aircraft lighting components, and the Electronic Warfare Management System.